WHAT IS CLAIMED IS:

- 1. A DNA segment encoding a human type α PDGF receptor protein.
- A DNA segment according to claim 1,
 wherein said segment comprises genomic clone T11
 or cDNA clone TR4.
 - A DNA segment, according to claim
 wherein said protein has the amino acid
 sequence defined in Figure 3.
- 10 4. A recombinant DNA molecule comprising a DNA segment according to claim 1 and a vector.
 - 5. A culture of cells transformed with a DNA segment according to claim 1.
- 6. A method of producing a human type α PDGF receptor protein comprising culturing cells according to claim 5 under conditions such that said protein is produced and isolating said protein from said cells.
- 7. A human type α PDGF receptor protein having the amino acid sequence defined in Figure 3.

- 8. An antibody specific for a protein having the amino acid sequence of a type α human PDGF receptor protein, according to claim 7.
- 9. An antibody according to claim 8,
 5 wherein said antibody is specific for only a type
 α PDGF receptor protein.

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- 10. An antibody specific for a protein having the amino acid sequence of a type β human PDGF receptor protein, wherein said antibody is specific for only a type β human PDGF receptor protein.
- 11. A bioassay for expression of a type α PDGF receptor gene comprising the steps of:
 - i) contacting a biological sample
 suspected of containing RNA with a
 DNA probe comprising a DNA segment
 according to claim 1, under
 conditions such that a DNA:RNA
 hybrid molecule containing said DNA
 probe and complementary RNA is
 formed; and
 - ii) determining the amount of said DNA
 probe present in said hybrid
 molecules.

- 12. A bioassay for a type α PDGF receptor antigen comprising the steps of:
- i) contacting a biological sample suspected of containing polypeptides with an antibody according to claim 8, under conditions such that a specific complex of said antibody and said antigen is formed; and

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- ii) determining the amount of said antibody in said complexes.
 - 13. A bioassay for type β PDGF receptor antigen comprising the steps of:
 - i) contacting a biological sample
 suspected of containing
 polypeptides with an antibody
 according to claim 10, under
 conditions such that a specific
 complex of said antibody and said
 antigen is formed; and
 - ii) determining the amount of said antibody in said complexes.

- 13. A bioassay for type β PDGF receptor antigen comprising the steps of:
 - i) obtaining a biological sample containing polypeptides;

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- ii) reacting said sample with an antibody according to claim 10; and
- iii) determining the amount said
 antibody bound by said
 polypeptides.